PATENT
Attorney Docket No. 06028.0035-00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	
François COTTARD et al.	Group Art Unit: 1751
Application No.: 10/728,954	Examiner: Eisa B. Elhilo
Filed: December 8, 2003	
For: COMPOSITION FOR THE OXIDATION DYEING OF KERATIN FIBERS, COMPRISING AT LEAST ONE OXIDATION DYE, AT LEAST ONE ASSOCIATIVE POLYMER, AND AT LEAST ONE AMINOSILICONE	Confirmation No.: 9017

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

DECLARATION UNDER 37 C.F.R. § 1.132

I, Isabelle SCHLOSSER, do hereby make the following declaration:

1. I am a French citizen, residing at 8, rue de Chantilly 75009 Paris FRANCE.

2. I am an agronomist engineer from the Institut Agronomique Paris-Grignon (INAPG), FRANCE (1991).

3. I am in charge of a Hair Color Laboratory in L'Oréal and have experience working with oxidation dye composition since 1998.

4. I understand the rejections made in the Office Action of July 3, 2007, in Application No.10/728,954.

5. Given my education and experience, particularly in the area of oxidation hair dyeing, I consider myself able to provide the following testimony based on experiments conducted by me or under my supervision:

COMPARATIVE EXPERIMENTS

I. Preparation of the Compositions

6. The following compositions were prepared:

Inventive Composition A1 was prepared according to the present claims and comprised, among other things, oxidative dyes, a cationic associative polymer (quaternized hydroxyethylcellulose modified with groups comprising a fatty chain) and an aminosilicone, with a weight ratio of the aminosilicone to the cationic associative polymer greater than 1. Comparative Composition A2 was prepared with the same ingredients than composition A1, except that the weight ratio of the aminosilicone to the cationic associative polymer is less than 1. *See* Table I hereunder.

Inventive Composition B1 was prepared according to the present claims and comprised, among other things, oxidative dyes, a cationic associative polymer (Polyurethane 16 which is an associative cationic polyurethane) and an aminosilicone, with a weight ratio of the aminosilicone to the cationic associative polymer greater than 1. Comparative Composition B2 was prepared with the same ingredients than composition B1, except that the weight ratio of the aminosilicone to the cationic associative polymer is less than 1. *See* Table II hereunder.

TABLE I

The following compositions A1 and A2 were prepared (amounts given in grams):

Ingredients:	A1 - Inventive	A2 - Comparative
Oxyethylenated (21 EO) stearylic alcohol	1.75	1.75
Oxyethylenated (2 EO) stearylic alcohol	4.5	4.5
Oleic acid	2.6	2.6
Propyleneglycol	2	2
Carboxyvinylic polymer (sold by Noveon under the name Carbopol 980)	0.4	0.4
Polydimethylsiloxane with aminoethyl iminopropyl groups and alpha-omega silanols, as a 60% cationic aqueous emulsion (sold by Dow Corning)	**3 AM**	**0.2 AM**
Hydroxyethylcellulose quaternized with lauryl di-methyl ammonium substituted epoxide (Polyquaternium-24, sold by Amerchol under the name Quatrisoft LM 200)	**0.2 AM**	**0.4 AM**
Mixture of linear alcohols in C_{18} to C_{24} ($C_{18}/C_{20}/C_{22}/C_{24}$ - 7/57/30/6) amount of alcohol higher than 95%	3	3
Hydroxypropylmethylcellulose	0.2	0.2
1-methyl-2-hydroxy-4-beta-hydroxyethylamino-benzene	0.8	0.8
1-hydroxy-4-amino-benzene	1.2	1.2
1-hydroxy-3-amino-benzene	0.2	0.2
1,4-diamino-benzene	0.2	0.2
1,3-dihydroxybenzene (resorcinol)	0.1	0.1
Coco acid monoisopropanolamide	3	3
Ethylene diamine tetracetic acid	0.2	0.2
Erythorbic acid	0.3	0.3
Sodium metabisulfite	0.7	0.7
Monoethanolamine	0.9	0.9
Aqueous ammonia containing 20% NH_3	11	11
Water	qsp 100	qsp 100
Weight ratio aminosilicone / cationic associative polymer	**15**	**0.5**

In Table I above, AM means active matter.

TABLE II

The following compositions B1 and B2 were prepared (amounts given in grams):

Ingredients:	**B1 - Inventive**	**B2 - Comparative**
Oxyethylenated (21 EO) stearylic alcohol	1.75	1.75
Oxyethylenated (2 EO) stearylic alcohol	4.5	4.5
Oleic acid	2.6	2.6
Propyleneglycol	2	2
Carboxyvinylic polymer (sold by Noveon under the name Carbopol 980)	0.4	0.4
Polydimethylsiloxane with aminoethyl iminopropyl groups and alpha-omega silanols, as a 60% cationic aqueous emulsion (sold by Dow Corning)	**3 AM**	**0.2 AM**
Polyurethane-16 (sold by Chimex under the name Mexomere PAR)	**0.2 AM**	**0.4 AM**
Mixture of linear alcohols in C_{18} to C_{24} ($C_{18}/C_{20}/C_{22}/C_{24}$ - 7/57/30/6) amount of alcohol higher than 95%	3	3
Hydroxypropylmethylcellulose	0.2	0.2
1-methyl-2-hydroxy-4-beta-hydroxyethylamino-benzene	0.8	0.8
1-hydroxy-4-amino-benzene	1.2	1.2
1-hydroxy-3-amino-benzene	0.2	0.2
1,4-diamino-benzene	0.2	0.2
1,3-dihydroxybenzene (resorcinol)	0.1	0.1
Coco acid monoisopropanolamide	3	3
Ethylene diamine tetracetic acid	0.2	0.2
Erythorbic acid	0.3	0.3
Sodium metabisulfite	0.7	0.7
Monoethanolamine	0.9	0.9
Aqueous ammonia containing 20% NH_3	11	11
Water	qsp 100	qsp 100
Weight ratio aminosilicone / cationic associative polymer	**15**	**0.5**

In Table II above, AM means active matter.

II. **Testing Procedure**

7. Each composition was mixed, at the time of use, with an oxidizing composition comprising 6 weight % of hydrogen peroxide, in an amount of 1 part of dye composition per 1.5 parts of oxidizing composition.

8. Each mixture obtained was applied to locks of hair having an alkaline solubility of 23.6 % and to locks of hair having an alkaline solubility of 50%, and then left in for 30 minutes at ambient temperature (23°C).

9. The locks were then rinsed with water, washed with a standard shampoo, and again rinsed with water, and then dried.

III. **Color Determination**

10. The color of the hair was determined by using the L*a*b* system, with a Datacolor® Spectraflash SF600X colorimeter.

11. According to this system, L* indicates the lightness of the color of the hair. The chromaticity coordinates are expressed by the parameters a* and b*, a* indicating the axis of red / green shades and b* the axis of yellow / blue shades.

12. The selectivity, which measures the difference of color between the locks having an alkaline solubility of 23.6 % and the locks having an alkaline solubility of 50%, was calculated according to the following formula:

$$\Delta E = \sqrt{(L^* - L_o^*)^2 + (a^* - a_o^*)^2 + (b^* - b_o^*)^2}$$

with L^*, a^* and b^* corresponding to the values obtained for the locks of hair having an alkaline solubility of 50 %, and L_0^*, a_0^* and b_0^* corresponding to the values obtained for the locks of hair having an alkaline solubility of 23.6 %.

The lower the value of ΔE, the better is the selectivity (ie, the lesser is the difference of color between the two types of hair locks).

IV. Results

13. The results are given in Tables III and IV below:

TABLE III

	Selectivity
Composition A1 (inventive)	1.3
Composition A2 (comparative)	5.0

TABLE IV

	Selectivity
Composition B1 (inventive)	1.0
Composition B2 (comparative)	8.2

V. Analysis of Results

14. These results show that the composition A1 according to the present claims (Inventive Composition A1, which contains as cationic associative polymer a quaternized hydroxyethylcellulose modified with groups comprising a fatty chain, with a weight ratio of the aminosilicone to the cationic associative polymer greater than 1) provides a selectivity that is 3.8 times higher than Comparative Composition A2 for which the weight ratio of the aminosilicone to the cationic associative polymer is less than 1.

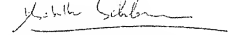
These results further show that the composition B1 according to the present claims (Inventive Composition B1, which contains as cationic associative polymer an associative cationic polyurethane, with a weight ratio of the aminosilicone to the cationic associative polymer greater than 1) provides a selectivity that is 8.2 times higher than Comparative Composition B2 for which the weight ratio of the aminosilicone to the cationic associative polymer is less than 1.

15. It is clear that Inventive Compositions A1 and A2 are more selective than Comparative Compositions B1 and B2.

16. Based on my education and experience, these results are unexpected given that it was not known that the use of a weight ratio of the aminosilicone to the cationic associative polymer greater than 1 as claimed would significantly improve the selectivity of the hair dyeing composition.

17. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further, that these statements were made with the knowledge that wilful false statements and the like so made are punishable by fine of imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such wilful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dated: 27/11/07

By: 
Isabelle SCHLOSSER